Index

AIIE TRANSACTIONS

Volume 10 1978

Subjects (coded) and titles

0100 ***Costs***

0103 Cost Estimating

"Future Costs of Service Contracts for Consumer Durable Goods," Uday S. Karmarkar; December 1978, page 380.

"Development of an Optimal Core Steel Slitting and Inventory Problem," Krishen G. Ahluwalia, Umesh Saxena; December 1978, page 399.

0105 Productivity

"Energy, Labor and Capital Consideration in Productivity Enhancements: An Editorial," James E. Bailey; September 1978, page 279

0200 ***Employee Relations***

0300 ***Engineering Economics***

"Engineering Economy and the Two Rates of Return–Mixed Mode Computations," Sanford Baum; March 1978, page 81

"Economic Packaging Frequency of Two Items Jointly Manufactured in a Multi-Stage System," A. Z. Szendrovits, S. K. Goyal; June 1978, page 208.

"An Input-Output Model with Stochastic Parameters for Economic Analysis," Ambrose Goichoechea, Don R. Hansen; September 1978, page 285.

"The Application of Marginal Analysis to the Economic Lot Scheduling Problem," Seiichi Fujita; December 1978, page 354.

0301 Cash Flow Analysis

"A Methodology for Obtaining the Probability Density Function of the Present Worth of Probabilistic Cash Flow Profiles," J. Wesley Barnes, C. Dale Zinn, Barry S. Eldred; September 1978, page 226.

0303 Investment Analysis

"A Goal Programming Application of Capital Project Selection in the Production Area," Bernard W. Taylor, Arthur J. Keown; March 1978, page 52.

"An Application of Industrial Engineering to Library Carrel Utilization," A. Dale Flowers, Leo F. Mulvehill; September 1978, page 315.

0400 ***Facilities Planning, Design***

0402 Facility location

"Lagrangean Relaxation Applied to Capacitated Facility Location Problems," A. Geoffrion, R. McBride; March 1978, page 40.

0407 Plant layout evaluation/testing procedures

"The Layout of Divisible Activities on the Line," Timothy J. Lowe, V. Darryle Thornton, Richard L. Francis; March 1978, page 58

0500 ***Functional operations***

0600 ***Human engineering***

0603 Ergonomics

"Industrial and Laboratory Evaluations of Personal Dry-Ice Cooling," Jerry R. Duncan, Stephan A. Konz; June 1978, page 131.

"Industrial Worker Pace Variability–A Study with Real Time and Posterior Analyses," S. Y. Nof, H. Gershoni, S. D. Ansell, A. Cohen; September 1978, page 321

0604 Learning

"The Effect of Alternate Periods of Learning and Forgetting on Economic Manufacturing Quantity," Dileep R. Sule; September 1978, page 338

0700 ***Incentive plans***

0800 ***Industrial engineering***

0900 ***Industries***

0903 Health care and other services

"A Simulation Analysis of an Automated Hospital Materials Handling System," Ralph W. Swain, John J. Marsh III; March 1978, page 10.

0905 Transportation, distribution

"An Industrial Application of the Traveling Salesman's Subtour Problem," Dennis H. Gensch; December 1978, page 362.

"Tariff Rate Determination Under Common Cost: The Cross-Subsidization Criterion in Practice," Richard W. Lake, J. Andrew MacDonald; December 1978, page 416.

0906 Others

"An Efficient Computational Alternative to 'Using Linear Programming to Design Oil Pollution Detection Schedules'," Lee E. Daniel, Jr., Sandal S. Hart, Thom J. Hodgson; March 1978, page 48.

1000 ***Management***

"A Simple Algorithm for A Workforce Scheduling Model," Der-San Chen; September 1978, page 244.

1007 Project management

"Resource Allocation of a Multi-Resource Project for

Variable Resource Availabilities," E. M. Dar-El, Y. Tur; September 1978, page 299.

1100 ***Material handling***

"A Simulation Analysis of an Automated Hospital Materials Handling System," Ralph W. Swain, John J. Marsh III; March 1978, page 10

1102 Conveyors

"A Queueing Analysis of Conveyor-Serviced Production Station and the Optimal Range Strategy," Masayuki Matsui, Tetsuro Shingu; March 1978, page 89.

1108 Packaging

"Economic Packaging Frequency of Two Items Jointly Manufactured in a Multi-Stage System," A. Z. Szendrovits, S. K. Goyal; June 1978, page 208.

1111 Storage, Warehousing

"Scheduling Policies for Automatic Warehousing Systems: Simulation Results," Leroy B. Schwarz, Stephen C. Graves, Warren H. Hausman; September 1978, page 260.

1200 ***Methods engineering***

1201 Automation, mechanization

"Models of Automatic Transfer Lines with Inventory Banks—A Review and Comparison," J. A. Buzacott, L. E. Hanifin; June 1978, page 197.

1203 Energy Conservation

"Energy, Labor and Capital Considerations in Productivity Enhancements: An Editorial," James E. Bailey; September 1978, page 279.

1205 Manufacturing engineering

"An Integrated Cutting Speed—Dispatch Policy Model," S. K. Goyal; June 1978, page 193

"A Dynamic Resource Allocation Model for a Machine Requirements Problem," David M. Miller, Robert P. Davis; September 1978, page 237.

1300 ***Quantitative methods***

"A Complex Linear Flow Model for Depicting Instructional Activity," E. Emory Enscore, Jr., David L. Raphael, Timothy K. Bennett; June 1978, page 149.

"Symmetry and Optimality Properties of the Single Machine Problem," M. I. Dessouky, R. E. Larson," June 1978, page 170.

"Heuristic Procedures for the Single Machine Problem to Minimize Maximum Lateness," R. E. Larson, M. I. Dessouky; June 1978, page 176.

1301 Mathematical models

"Lagrangean Relaxation Applied to Capacitated Facility Location Problems," A. Geoffrion, R. McBride; March 1978, page 40.

"A Queueing Model for A Tecynical Control Facility," M. J. Fischer, March 1978, page 76.

"A Queueing Analysis of Conveyor-Serviced Production Station and the Optimal Range Strategy," Masayuki Matsui, Tetsuro Shingu; March 1978, page 89.

"An Input-Output Model with Stochastic Parameters for Economic Analysis," Ambrose Goichoechea, Don R. Hansen; September 1978, page 285.

"Interpretation of Dispatching Policies on Queue Behavior via Simulation and Time Series Analysis," Harold J. Steudel, S. M. Pandit, S. M. Wu; September 1978, page 292.

"Spares Provisioning for Repairable Items: Cyclic Queues in Light Traffic," Donald Gross, John F. Ince; September 1978, page 307.

1302 Networks

"Network Models for Production Scheduling Problems with Convex Cost and Batch Processing," H. Donald Ratliff; March 1978, page 104

1303 Programming: linear, nonlinear

"An Efficient Computational Alternative to 'Using Linear Programming to Design Oil Pollution Detection Schedules'," Lee E. Daniel, Jr., Sandal S. Hart, Thom J. Hodgson; March 1978, page 48.

"A Goal Programming Application of Capital Project Selection in the Production Area," Bernard W. Taylor, Arthur J. Keown; March 1978, page 52.

"A Dynamic Program for Designing Factorial Experiments with Budget Constraints," John B. Neuhardt, Clark A. Mount-Campbell; June 1978, page 125.

"On Surrogated Linear Programming," K. C. Kapur; June 1978, page 214.

"A Dynamic Resource Allocation Model for a Machine Requirements Problem," David M. Miller, Robert P. Davis; September 1978, page 237.

"Development of an Optimal Core Steel Slitting and Inventory Policy," Krishen G. Ahluwalia, Umesh Saxena; December 1978, page 399.

1305 Simulation, games

"A Simulation Analysis of an Automated Hospital Materials Handling System," Ralph W. Swain, John J. Marsh III; March 1978, page 10

"Scheduling Policies for Automatic Warehousing Systems: Simulation Results," Leroy B. Schwarz, Stephen C. Graves, Warren H. Hausman; September 1978, page 260.

"The Impact of the Operating Environment on the Relative Performance of Various Computer Scheduling Policies," James E. Bailey, Vinod K. Sahney; December 1978, page 388.

1306 Applied Probability

"A Methodology for Obtaining the Probability Density Function of the Present Worth of Probabilistic Cash Flow Profiles," J. Wesley Barnes, C. Dale Zinn, Barry S. Eldred; September 1978, page 226.

1400 ***Production and inventory control***

"Balancing Single Model Assembly Lines: Comments on a Paper by E. M. Dar-El (Mansoor)," William V. Gehrlein, James H. Patterson; March 1978, page 109.

"Estimating the Output of a Series Production System," Richard A. Murphy; June 1978, page 139.

"Analysis of a Multi-Criteria Project Crashing Model," Laurence J. Moore, Barnard W. Taylor III, Edward R. Clayton, Sang M. Lee; June 1978, page 163.

"Symmetry and Optimality Properties of the Single Machine Problem," M. I. Dessouky, R. E. Larson; June 1978, page 170.

"Heuristic Procedures for the Single Machine Problem

to Minimize Maximum Lateness," R. E. Larson, M. I. Dessouky; June 1978, page 176.

"A Simple Algorithm for A Workforce Scheduling Model," Der-San Chen; September 1978, page 244.

"Resource Allocation of A Multi-Resource Project for Variable Resource Availabilities," E. M. Dar-El, Y. Tur; September 1978, page 299.

"The Effect of Alternate Periods of Learning and Forgetting on Economic Manufacturing Quantity," Dileep R. Sule; September 1978, page 338.

"The Application of Marginal Analysis to the Economic Lot Scheduling Problem," Seiichi Fujita; December 1978, page 354.

1402 Forecasting

"The Impact of Uncertainty on Forecasts of Learning and Technological Progress," James V. Jucker, Takuro Tsukatani; June 1978, page 118.

"A Method for Determining the Autocovariance Function of a Box-Jenkins Forecasting Model," Eginhard J. Muth; September 1978, page 271.

1403 Inventory control

"An EOQ Inventory Model for Items with Gamma Distributed Deterioration," Pandu R. Tadikamalla; March 1978, page 100.

"Models of Automatic Transfer Lines with Inventory Banks—A Review and Comparison," J. A. Buzacott, L. E. Hanifin; June 1978, page 197.

"An Improved Formula for Inventory Decisions Under Serivce and Safety Stock Constraints," Chandrasekhar Das; June 1978, page 217.

"Inventory Control Under A Probabilistic Time-Varying, Demand Pattern," Edward Silver: December 1978, page 371.

"Development of an Optimal Core Steel Slitting and Inventory Policy," Krishen G. Ahluwalia, Umesh Saxena; December 1978, page 399.

1404 Materials management

"A Procedure for Solving the 1.5-Dimensional Coil Slitting Problem," Robert W. Haessler; March 1978, page 70.

"A Dynamic Resource Allocation Model for A Machine Requirements Problem," David M. Miller, Robert P. Davis; September 1978, page 237.

1405 Production control

"The Layout of Divisible Activities on the Line," Timothy J. Lowe, V. Darryl Thornton, Richard L. Francis; March 1978, page 58.

1406 Production planning

"An Integrated Cutting Speed–Dispatch Policy Model," S. K. Goyal; June 1978, page 193.

1407 Production scheduling

"Scheduling Algorithms for the Unbalanced Production Line: An Analysis and Comparison," Randall P. Sadowski, Russell E. Jacobson; March 1978, page 31.

"Network Models for Production Scheduling Problems with Convex Cost and Batch Processing," H. Donald Ratliff; March 1978, page 104.

"Group Production Scheduling for Minimum Total Tardiness– Part (I)," Teruhiko Yoshida, Nobuto Nakamura, Katsundo Hitomi; June 1978, page 157.

"Multiple Resource–Constrained Scheduling Using Branch and Bound," Joel P. Stinson, Edward W. Davis, Basheer M. Khumawala; September, 1978, page 252.

"Scheduling Policies for Automatic Warehousing Systems: Simulation Results," Leroy B. Schwarz, Stephen C. Graves, Warren H. Hausman; September 1978, page 260.

"Interactive Scheduling: Historical Survey and State of the Art," Victor B. Godin; September 1978, page 331.

"An Industrial Application of the Traveling Salesman's Subtour Problem," Dennis H. Gensch; December 1978, page 362.

"The Impact of the Operating Environment on the Relative Performance of Various Computer Scheduling Policies," James E. Bailey, Vinod K. Sahney; December 1978, page 388.

1500 *Quality Control*

1501 Inspection

"Inspection Error and Its Adverse Effects: A Model with Implications for Practitioners," Rufus D. Collins, Jr., Kenneth E. Case, G. Kemble Bennett: March 1978, page 2.

"Inspection Errors and Statistical Quality Control: A Survey," Alan L. Dorris, Bobbie L. Foote; June 1978, page 184.

1503 Reliability

"Spares Provisioning for Repairable Items: Cyclic Queues in Light Traffic," Donald Gross, John F. Ince; September 1978, page 307.

"Future Costs of Service Contracts for Consumer Durable Goods," Uday S. Karmarkar; December 1978, page 380.

1504 Sampling

"Choice of Double Sampling Plans Based on Prior Distributions and Costs," R. Dennis Stewart, Douglas C. Montgomery, Russell G. Heikes; March 1978, page 19.

1600 *Work Measurement*

"An Application of Industrial Engineering to Library Carrel Utilization," A Dale Flowers, Leo F. Mulvehill September 1978, page 315.

1604 Pace rating

"Industrial Worker Pace Variability–A Study with Real Time and Posterior Analyses," S. Y. Nof, H. Gershoni, S. D. Ansell, A. Cohen; September 1978, page 321.

1700 *Data Processing Systems design*

"An Efficient Computational Alternative to 'Using Linear Programming to Design Oil Pollution Detection Schedules'," Lee E. Daniel, Jr., Sandal S. Hart, Thom J. Hodgson; March 1978, page 48.

"The Impact of the Operating Environment on the Relative Performance of Various Computer Scheduling Policies," James E. Bailey, Vinod K. Sahney; December 1978, page 388.